

20031213.qrp v03_n133.qrl.20031213

Date: Sat, 13 Dec 2003 19:03:14 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 3133

QRP-L Digest 3133

Topics covered in this issue include:

- 1) [162961] Another KG6CYN DDS VFO complete
by VE3JC John Cumming <jbcumming@wwdc.com>
- 2) [162962] Re: 80m 0200-0400
by "KXBill" <KXB-1@cox.net>
- 3) [162963] Re: Fox Hunt Questions
by John Sielke <jsielke@pobox.com>
- 4) [162964] Fwd: HOT logs please
by dl6aaf@t-online.de
- 5) [162965] Re: Another KG6CYN DDS VFO complete
by James R Giammanco <n5ib@juno.com>
- 6) [162966] Re: Single wire feed Windom?
by Karl Larsen <k5di@zianet.com>
- 7) [162967] Re: Another KG6CYN DDS VFO complete
by "Trevor Jacobs" <kg6cyn@softhome.net>
- 8) [162968] Followup: Alpha Delta Outpost(tm) work-alike ground for Buddistick
by Michael Babineau <michael.babineau@sympatico.ca>
- 9) [162969] OT: Cellphone Conversions
by "Mike Majority" <n4vbw@earthlink.net>
- 10) [162970] PEP Mod for OHR WM-1/WM-2 Wattmeters
by "Michael Melland, W9WIS" <w9wis@charter.net>
- 11) [162971] Re: 80m 0200-0400
by "Mike WA8BXN" <hubby2k@hotmail.com>
- 12) [162972] 80M test
by "ki0ky" <ki0ky@earthlink.net>
- 13) [162973] Re: 80m 0200-0400
by "KXBill" <KXB-1@cox.net>
- 14) [162974] PIC-EL Kit - orders now being accepted
by "George Heron N2APB" <n2apb@clearviewcatv.net>
- 15) [162975] DC amplifier with <35 ohms output impedance
by "Jason Hsu" <jhs001@heronetwork.com>
- 16) [162976] KX1 #292 is alive
by W0rw@aol.com
- 17) [162977] Re: Fox Hunt Questions
by "Ron KU7Y" <ku7y@tds.net>
- 18) [162978] Re: DC amplifier with <35 ohms output impedance
by Steven Weber <kd1jv@moose.ncia.net>
- 19) [162979] Re[2]: Single wire feed Windom?

- by "Oleg V. Borodin" <master72@lipetsk.ru>
- 20) [162980] The great 80 meter test
by "Walt Amos" <waltk8cvamos@aaaahawk.com>
- 21) [162981] Re[2]: Single wire feed Windom?
by Karl Larsen <k5di@zianet.com>
- 22) [162982] Re: DC amplifier with <35 ohms output impedance
by "Bruce Kizerian" <kizerian@xmission.com>
- 23) [162983] RE: [qrp-l] DC amplifier with <35 ohms output impedance
by "Nick Kennedy" <wa5bdu@tcainternet.com>
- 24) [162984] DC Amp...
by Ed Tanton <n4xy@earthlink.net>
- 25) [162985] Fwd: Saturn Rings in the New Year
by Ed Tanton <n4xy@earthlink.net>
- 26) [162986] FT-857 Neat Tuning Indicator
by Chuck Carpenter <w5usj@9plus.net>
- 27) [162987] ScQRPion Paddle Dimensions
by "E. Roswell" <eroswell@monmouth.com>
- 28) [162988] FS: Small Wonder Labs SW80+
by "Jim Sheldon" <w0eb@cox.net>
- 29) [162989] Re: DC amplifier with <35 ohms output impedance
by "Thomas Kuehl" <ac7a@earthlink.net>
- 30) [162990] Re: DC amplifier with <35 ohms output impedance
by "Jason Hsu" <jhs001@heronetwork.com>
- 31) [162991] 80m Fox hunts et al
by "Joseph Trombino Jr" <w2kj@bellsouth.net>
- 32) [162992] RE: FS: SW80+
by "Jim Sheldon" <w0eb@cox.net>
- 33) [162993] [FS] Emdbd Rsch EPS-1 DC/DC Conv.
by Chuck Carpenter <w5usj@9plus.net>
- 34) [162994] Hello? Hello? CQ 10m
by "Armin Hachmer" <armin@muskoka.com>
- 35) [162995] Re[3]: Single wire feed Windom?
by "Oleg V. Borodin" <master72@lipetsk.ru>
- 36) [162996] Sunday Morning SSB/CW QRP Net
by "Ken La Rose" <kenlar@csolve.net>
- 37) [162997] RE: [qrp-l] Re: DC amplifier with <35 ohms output impedance
by "Nick Kennedy" <wa5bdu@tcainternet.com>
- 38) [162998] Re: DC amplifier with <35 ohms output impedance
by John Kuklewicz N7ZN <kukl@cybrquest.com>
- 39) [162999] Re: Protection For The KX1 ...
by W2BJ <barry@w2bj.com>
- 40) [163000] Re: Hello? Hello? CQ 10m
by "Brian Riley (maillist)" <n1bq_list@wulfdan.org>
- 41) [163001] Re: DC amplifier with <35 ohms output impedance
by "PHILIP DECAIRE" <pedecaire@email.msn.com>
- 42) [163002] For Sale QPP stuff
by "Brian Olson" <brolson@ties.k12.mn.us>
- 43) [163003] Re: DC amplifier with <35 ohms output impedance

by "Russ Hines" <wb8zcc@fuse.net>
44) [163004] RE: Hello? Hello? CQ 10m
by "Emmersome Bigguns" <n8ie@woh.rr.com>
45) [163005] Re: Hello? Hello? CQ 10m
by "John Shannon" <jsk3wvp@alltel.net>
46) [163006] Re: Re[3]: Single wire feed Windom?
by Jim Lyons <lyons@canada.com>
47) [163007] Increasing activity on 80M CW
by "John Shannon" <jsk3wvp@alltel.net>
48) [163008] RE: Download Price for QST
by Jim WD9EYB <wd9eyb1203@yahoo.com>
49) [163009] ARRL 10 meter contest
by Karl Larsen <k5di@zianet.com>
50) [163010] Re: Single wire feed Windom
by "James R. Duffey" <JamesDuffey@comcast.net>
51) [163011] Re: Hello? Hello? CQ 10m
by George Fremin III <geoiii@kkn.net>
52) [163012] Tonights CQC contest es 80 meter fox
by Bob KB2FEL <kb2fel@yahoo.com>
53) [163013] Re: Re[2]: Single wire feed Windom?
by George Franklin <w0av@juno.com>
54) [163014] Re: New Morse code character
by Ray Sills <raysills@1stconnect.com>
55) [163015] Elmer 160: Lesson 4
by "John J. McDonough" <wb8rcr@arrl.net>
56) [163016] IRC QRP channel?
by Ken <kloc@commspeed.net>
57) [163017] Re: Tonights CQC contest es 80 meter fox
by "Mike WA8BXN" <hubby2k@hotmail.com>
58) [163018] Re: Hello? Hello? CQ 10m
by "Armin Hachmer" <armin@muskoka.com>
59) [163019] Re: Hello? Hello? CQ 10m
by "Armin Hachmer" <armin@muskoka.com>
60) [163020] Re: Elmer 160: Lesson 4
by Stephen Wandling <stephen@SwiftsureConsulting.com>
61) [163021] Re: Tonights CQC contest es 80 meter fox
by Bob KB2FEL <kb2fel@yahoo.com>
62) [163022] Re: IRC QRP channel?
by "Oleg V. Borodin" <master72@lipetsk.ru>
63) [163023] Re: Hello? Hello? CQ 10m
by Wayne Rogers <w5kdj@juno.com>
64) [163024] Re: IRC QRP channel?
by John Rollins <kd7bcy@teleport.com>
65) [163025] DSWMULTI project scores its first DX...
by <bill@n4qa.com>
66) [163026] Paddle Polarity
by "John Farnsworth" <johnfarns@bellsouth.net>
67) [163027] QST

by "Goody K3NG" <k3ng@qrpis.org>
68) [163028] Re: IRC QRP channel?
by Jim Tittsler <7J1AJH@OnJapan.net>
69) [163029] RE: [qrp-l] Paddle Polarity
by "Nick Kennedy" <wa5bdu@tcainternet.com>
70) [163030] Re: new processor chip for LDG tuners - Results
by "NZ8J" <nz8j@woh.rr.com>

Date: Fri, 12 Dec 2003 19:35:17 -0500
From: VE3JC John Cumming <jbcumming@wwdc.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [162961] Another KG6CYN DDS VFO complete
Message-ID: <3FDA5EC5.1050802@wwdc.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Well aside from labelling and some scarce-as-hen's-teeth small diameter mounting screws, I finally got around to finishing Kg6CYN's dds/vfo. What a delightful project!

I really didn't have a specific use in mind for this, but one thing I've noticed immediately is that it will help me to "set up" the display for my home brew Spectrum Analyzer, i.e. to dial in a desired frequency range.

I wanted to mount this in a Hammond 1598BBU box (5X5X2") that I had bought off of Fred Hammond VE3HC himself for two bits, some years ago. Therefore I used a piece of perf board and ribbon cable to front-mount the display. The encoder knob, toggle switches, and push buttons are rather crowded in the limited front-panel real estate, but are quite easy to operate. I mounted pwr and backlight toggle switches on the back panel, along with a binding post for Tx control.

I am certainly no machinist, and no one can accuse me of making a kit that looks too professional. But for anyone that's interested I've put a few photos (including the SA spectrum display) at http://users.imag.net/~lon.jbcumming/kg6cyn_dds_vfo.htm

My sincere thanks to Trevor, Jim N5IB for his wonderful manual, and the various QRPers who organized group buys of the bits and pieces. Oh yes, a BIG thankyou to Analog Devices for their "sample chip" program!

72, John VE3JC

Q | VE3JC John Cumming
/\ | London, ON CANADA
@` /<----- jbcumming@wwdc.com
(*) \(*) hf qrp cw bicycle mobile
http://www.geocities.com/ve3jc/

Date: Fri, 12 Dec 2003 17:46:01 -0700
From: "KXBill" <KXB-1@cox.net>
To: <Stevenu7t@aol.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [162962] Re: 80m 0200-0400
Message-ID: <002501c3c112\$7b35c780\$76d70344@ph.cox.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Steve:

I will be on 3,560 +/- at 0200z Should have a good path between Reno and Phoenix. It's the boy's back east I'm most interested in at this early time of 0200. C U there

Cheers

BillH_w7kxb_

----- Original Message -----

From: <Stevenu7t@aol.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Friday, December 12, 2003 09:44
Subject: Re: 80m 0200-0400

> Ed and Al,
> OK 0200 to 0400z on 80m. I am not available on Saturday night. What other
> night works for you. Today, Friday, is code practise 0330 to 0430. SSB or CW
> ?? Sunset is 0230z in Reno. We could use the eqsl sked chat room.
> Steve, NU7T
>

Date: Fri, 12 Dec 2003 19:49:25 -0500
From: John Sielke <jsielke@pobox.com>
To: qrp-1@lehigh.edu

Subject: [162963] Re: Fox Hunt Questions
Message-ID: <3FDA6215.1070807@pobox.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

> Here are some questions that will help decide what changes might be
> made to the QRP-L Fox Hunts. If you have an opinion on these questions or
> have additional ideas, please add them to this message in a reply.

Just to be sure I wasn't putting my foot in mouth (again), I checked the Official QRP-L Fox Hunt Page to see who was on the Fox Hunt Committee. I am afraid I don't see K5DI on there anywhere.

While I am all in favor of somehow incorporating 80M into the Fox Hunts, I think it is up to the Fox Hunt folks to conduct any polls, etc., concerning them, as it would be up to them to decide "what changes might be made..."

Perhaps the Fox Hunt folks could be asked nicely to look into this?

John W2AGN (aka "Mr. Diplomacy")

Date: Sat, 13 Dec 2003 02:05:33 +0100 (CET)
From: dl6aaf@t-online.de
To: qrp-l@lehigh.edu
Subject: [162964] Fwd: HOT logs please
Message-ID: <200312130105.hBD15YR01175@joringel.privnet.de>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

From: DJ7ST @ DB0ABZ.#NDS.DEU.EU (Hartmut)
To: OQRPWW @ DB0ABZ.#NDS.DEU.EU
X-Info: Einspielung ohne Passwortschutz

Dear friends,

if you participated in the HOT-PARTY at Nov 16th and not yet did send your log: please do so within the next few days (deadline Dec 15th) by packet (DJ7ST@DB0ABZ) or "snail mail".

mni tks es hpe cuagn in ORIGINAL-QRP-CONTEST at Dec-27/28th

73 Hal, DJ7ST

Date: Fri, 12 Dec 2003 17:48:18 PST
From: James R Giammanco <n5ib@juno.com>
To: jbcumming@wwdc.com, qrp-L@Lehigh.edu
Subject: [162965] Re: Another KG6CYN DDS VFO complete
Message-ID: <20031212.203733.4647.2.n5ib@juno.com>

Congrats, John, on a successful build of Trev's excellent design.

I've found mine becoming an indispensable tool around the shack and shop, from the Frequency Measuring Test, to aligning a K1, to bringing a dead HW9 back to life. And soon to try out with a Hayward/DeMaw crystal measuring unit.

I've finally put up a few photos of my finished unit at
<<http://www.qsl.net/n5ib>> The link to the DDS project is near the bottom of the righthand column of thumbnails.

72
Jim N5IB

On Fri, 12 Dec 2003 19:35:17 -0500 VE3JC John Cumming
<jbcumming@wwdc.com> writes:
>Well aside from labelling and some scarce-as-hen's-teeth small
>diameter
>mounting screws, I finally got around to finishing Kg6CYN's dds/vfo.
>What a delightful project!

The best thing to hit the internet in years - Juno SpeedBand!
Surf the web up to FIVE TIMES FASTER!
Only \$14.95/ month - visit www.juno.com to sign up today!

Date: Fri, 12 Dec 2003 18:56:18 -0700 (MST)
From: Karl Larsen <k5di@zianet.com>
To: ARDUJENSKI@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [162966] Re: Single wire feed Windom?
Message-ID: <Pine.LNX.4.44.0312121847450.4704-100000@bucket.dog>

MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 12 Dec 2003 ARDUJENSKI@aol.com wrote:

> I have found several articles regarding the twin feed Off center Fed Dipole
> (WINDOM) but very little regarding the original single wire feed. I have used
> Reg's WINDOM program to explore the optimal dimensions and found that with some
> tweaking you can get a fairly uniform feed impedance at the base of the

A long time ago I used the classic Windom antenna. It was 134 feet of wire fed 30% from the close end with a single wire of no particular length. This was about 1970 and the 134 feet of wire was tossed onto the roof of a 1 story motel and the feed wire snaked into my room, across the room to near the bathroom where Ground was. I had some kind of antenna tuner home built and forgotton now.

This antenna worked fine on 80-20 meters, but not at all well on 15 meters. My radio didn't have 10 meters. I got back to the USA pretty well on 20 and 80 meters. I was in the middle-east. I worked a bunch of 2 letter callsigns on the low end of 80 meters. But could not get Alaska.

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

Date: Fri, 12 Dec 2003 17:55:40 -0800
From: "Trevor Jacobs" <kg6cyn@softhome.net>
To: jbcumming@wwdc.com,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [162967] Re: Another KG6CYN DDS VFO complete
Message-ID: <00ae01c3c11c\$36677220\$38fea8c0@TREVORMAINPC>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

FB John! Looks like you did a fantastic Job on the build! I like the case you got for 25 cents hi! Hope you are having fun with it.

Take care...

73's Trev - KG6CYN

<http://www.qsl.net/kg6cyn>

----- Original Message -----

From: "VE3JC John Cumming" <jbcumming@wwdc.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Friday, December 12, 2003 4:35 PM

Subject: Another KG6CYN DDS VFO complete

> Well aside from labelling and some scarce-as-hen's-teeth small diameter
> mounting screws, I finally got around to finishing Kg6CYN's dds/vfo.
> What a delightful project!
>
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> noticed immediately is that it will help me to "set up" the display for
> my home brew Spectrum Analyzer, i.e. to dial in a desired frequency range.
>
> I wanted to mount this in a Hammond 1598BBU box (5X5X2") that I had
> bought off of Fred Hammond VE3HC himself for two bits, some years ago.
> Therefore I used a piece of perf board and ribbon cable to front-mount
> the display. The encoder knob, toggle switches, and push buttons are
> rather crowded in the limited front-panel real estate, but are quite
> easy to operate. I mounted pwr and backlight toggle switches on the
> back panel, along with a binding post for Tx control.
>
> I am certainly no machinist, and no one can accuse me of making a kit
> that looks too professional. But for anyone that's interested I've put
> a few photos (including the SA spectrum display) at
> http://users.imag.net/~lon.jbcumming/kg6cyn_dds_vfo.htm
>
> My sincere thanks to Trevor, Jim N5IB for his wonderful manual, and the
> various QRPers who organized group buys of the bits and pieces. Oh yes,
> a BIG thankyou to Analog Devices for their "sample chip" program!
>
> 72, John VE3JC
>
>
>
> | VE3JC John Cumming
> | Q London, ON CANADA
> | /\ jbcumming@wwdc.com
> | @' /<----- hf qrp cw bicycle mobile
> | (*) \(*) <http://www.geocities.com/ve3jc/>
>
>

Date: Fri, 12 Dec 2003 20:59:44 -0500
From: Michael Babineau <michael.babineau@sympatico.ca>
To: qrp-l@Lehigh.EDU, buddipole@yahoogroups.com, ov-qrp@yahoogroups.com
Subject: [162968] Followup: Alpha Delta Outpost(tm) work-alike ground for Buddistick
Message-ID: <058BF29B-2D10-11D8-AB3D-00039309268A@sympatico.ca>
Mime-Version: 1.0 (Apple Message framework v552)
Content-Type: text/plain; charset=US-ASCII; format=flowed
Content-Transfer-Encoding: 7bit

Folks :

Just thought that I would mention that I now have a website up and I created a page with a description and pictures of the foil tape ground system that I posted an article on earlier.

This idea can be applied to just about any ground mounted short vertical antenna, including the PAC-12, MP-1/MP-2, Hamstick, Outbacker etc. to provide a compact yet efficient ground system

Anyone interested can just go to :

http://www.qsl.net/ve3wmb/foil_gnd.html

Michael VE3WMB

Date: Fri, 12 Dec 2003 21:36:41 -0500
From: "Mike Majority" <n4vbv@earthlink.net>
To: qrp-l@lehigh.edu
Subject: [162969] OT: Cellphone Conversions
Message-ID: <410-220031261323641437@earthlink.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII

To update my earlier postings on converting old analog cellular bag phones to the 902 Ham band:

1. Looking inside the phones, no readily modifiable parts without some major work on the board.
2. From researching the web sites I posted earlier, it looks as if some re-programming will be required. I'm not familiar enough with the phones to attempt that (wonder if FORTRAN is still used - HI!).

Thanks to all who responded to the earlier post with suggestions, and

apologies to the many offline emails I received asking for additional data.
This project is above my current capability.

The phones didn't go to waste, however. I gave one to my parents as a "safety net" to use while travelling and activated the phone with a prepaid card, \$40 for 2 hours time that includes nationwide long distance and roaming. The second phone went to my mother-in-law for the same purpose, with only the Emergency 911 capability until I decide which of the 2 companies in Harlan, KY has the best prepaid deal. So they definitely didn't go to waste. Not bad for \$5 per phone.

The third phone? It's still in the shack. Haven't totally given up yet! Thanks again to all that responded. If I find a procedure that works I'll post it here.

THX fer BW,
Mike, N4VBV

--- Mike Majority
--- n4vbv@earthlink.net
--- EarthLink: The #1 provider of the Real Internet.

Date: Fri, 12 Dec 2003 21:23:04 -0800
From: "Michael Melland, W9WIS" <w9wis@charter.net>
To: <qrp-1@Lehigh.EDU>
Subject: [162970] PEP Mod for OHR WM-1/WM-2 Wattmeters
Message-ID: <004201c3c139\$2f398020\$0300a8c0@e5o8v5>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I used Larry's PEP mod on my WM-2 and it works great ! I can switch between PEP and AVerage and there is no loss of accuracy.

Mike, W9WIS

Date: Fri, 12 Dec 2003 22:26:11 -0500 (Eastern Standard Time)
From: "Mike WA8BXN" <hubby2k@hotmail.com>
To: <qrp-1@Lehigh.EDU>, <KXB-1@cox.net>
Subject: [162971] Re: 80m 0200-0400
Message-ID: <3FDA86D3.000001.00416@compaq1500>
MIME-Version: 1.0
Content-Type: Text/Plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Bill, W7KXB -

Copying you 559 at 3:24 GMT on 3560 from near Cleveland Oh, will try to call
when you are done with current QSO.

73/72 - Mike WA8BXN

Date: Fri, 12 Dec 2003 20:34:14 -0700
From: "ki0ky" <ki0ky@earthlink.net>
To: <qrp-1@lehigh.edu>
Subject: [162972] 80M test
Message-ID: <000301c3c129\$fb987b40\$8a48fea9@desktop>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I would be interested in test 80 M. QTH is Hotchkiss CO, 60 miles east of
Grand Jct. and about 150 miles sw of Denver.

73,

Steve Schroder, KI0KY

Date: Fri, 12 Dec 2003 20:56:07 -0700
From: "KXBill" <KXB-1@cox.net>
To: "Mike WA8BXN" <hubby2k@hotmail.com>, <qrp-1@Lehigh.EDU>
Subject: [162973] Re: 80m 0200-0400
Message-ID: <010601c3c12d\$09942a20\$76d70344@ph.cox.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Sorry I mksed you Mike...Just finished with Greg-AK7Y.....just gave you a call at 0354...I'll hang around for a bit.

KXBill

----- Original Message -----

From: "Mike WA8BXN" <hubby2k@hotmail.com>

To: <qrp-1@Lehigh.EDU>; <KXB-1@cox.net>

Sent: Friday, December 12, 2003 20:26

Subject: Re: 80m 0200-0400

>

> Bill, W7KXB -

> Copying you 559 at 3:24 GMT on 3560 from near Cleveland Oh, will try to call

> when you are done with current QSO.

> 73/72 - Mike WA8BXN

>

Date: Fri, 12 Dec 2003 23:57:12 -0500

From: "George Heron N2APB" <n2apb@clearviewcatv.net>

To: "NJQRP" <njqrp@njqrp.org>, "QRP-L" <qrp-1@Lehigh.EDU>

Subject: [162974] PIC-EL Kit - orders now being accepted

Message-ID: <002801c3c135\$93dfa1c0\$6400a8c0@n2apb1>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

The AmQRP "PIC-EL Kit" is a multi-function PIC16F84A-based project board that serves as the basis for the experiments being conducted by John McDonough, WB8RCR in the online PIC Elmer 160 course. The course material is geared around use of common I/O components -- pushbuttons, LEDs, LCD display, rotary encoder and speaker -- and the experiments are designed to take the student through a step-by-step creation of software programs that beep, display and otherwise interact with the user in an instructional manner.

Further, the PIC-EL project board contains an integrated, built-in serial programmer that allows the user to download new programs directly from the PC and "burn" them into the PIC microcontroller ... without requiring any other specialized programming hardware! Thus whenever you make a change in the software source code on your PC, by following the course material or if making your own original program, all that's needed to program the PIC

device is to connect the board to the PC with a standard serial cable.

We designed the PIC-EL project board with the QRPer specifically in mind. Realizing that hams just love to generate RF and use it in all sorts of ways, we provided an ability for the user to plug in the inexpensive and ubiquitous DDS Daughtercard from the NJQRP Club. Some experiments downstream in the Elmer 160 course will provide software that allows the PIC to control the DDS Daughtercard to produce signals in the range of 1 Hz all the way up to 30 MHz. A rotary encoder "dial" provided standard on the board allows one to use the PIC-EL and a stable signal generator, a super precise VFO or perhaps even as a signal source for receiver calibration. A BNC connector is also provided in the kit to help enable these common uses. PIC-EL designer Craig Johnson, AA0ZZ already provided a modified version of his popular DDS control software signgen3a that runs on the project board, making the kit immediately useful even while just starting the Elmer 160 course.

Can there be even more capabilities built into the PIC-EL project board? You bet! Not only can the PIC-EL generate signals, it can measure the frequency of an input signal to the BNC connector. Just change the position of an onboard jumper and you'll route signals coming into the BNC jack over to a small circuit that conditions the signal so the PIC microcontroller can determine its frequency. Again using software developed in one of the Elmer 160 experiments, the PIC-EL board will serve as a frequency counter for your bench, displaying the measured signal on the LCD.

The exciting uses of the PIC-EL board continues with design team's addition of a couple of 1/8" stereo jacks on the board. With the right software being developed as course material by John McDonough WB8RCR, you will be able to plug in your iambic paddles (like the nifty ones being produced by the AZ ScQRPions www.swlink.net/~w5jh/brasspaddle.htm) and have the project board serve as a keyer with adjustable speed, weighting and multiple memory buffers. The onboard speaker serves as a side tone for your memory keyer. Just connect the "keyline" output signal to your rig by cabling from the other 1/8" jack and you'll be able to key your rig with the PIC-EL project board. So once again, not only will you learn how to program the PIC to do this keyer function, but you'll have a fully operational keyer for your rig on the bench!

The PIC-EL project board was designed to fit into a common 5.25" x 5" x 1.5" plastic enclosure, such as from Radio Shack (p/n 270-214.) The board fits neatly in this clamshell case and the input/output jacks were layed out to be at the top and bottom of the pc board, thus being able to protrude from the end panels of the case.

But wait, there's more! The AmQRP design team also provided flexibility in the PIC-EL board layout to allow you to use an external PIC programmer, in case you already have a favorite one. By unplugging a single jumper on the board, you can effectively separate the programmer circuit from the PIC

microcontroller and functional circuits. This allows you the to connect in your external programmer to the onboard PIC so you can use the same programming system that you've been using for years. Alternatively, you can also use the same circuit separation technique to allow the built-in PIC-EL programmer to connect over to another project board to program its PIC microcontroller. Program an external chip with the PIC-EL programmer, or use an external programmer to program the PIC-EL chip -- either way, it's flexibility deluxe!

SPECIFICATIONS

The PIC-EL project board provides components that allow the radio amateur to follow along directly in the Elmer 160 course material, and perform many useful projects in the shack with the completed board. The PIC-EL Kit contains ...

- Socketed PIC16F84 Microcontroller
- RS-232 serial port programmer
- Pushbuttons (3) and LEDs (3)
- Miniature piezo speaker (500 Hz to 10 KHz)
- Rotary encoder (30 steps per revolution)
- 8-character liquid crystal display
- 1/8" jacks (2) for connecting your paddle and rig
- Socket for the NJQRP DDS Daughtercard
- BNC jack for signal input and output
- Board size: 4" wide by 4.8" tall
- Power req'ts: 12-14V DC, 150 ma
- Assembly manual on CD-ROM

ORDERING

The PIC-EL Kit is now orderable from the AmQRP Club. The kit costs \$35 for US & Canadian destinations, and \$39 for other foreign destinations.

(Maryland residents must add 5% sales tax, for a total of \$36.75.) You may order by PayPal (send to n2apb@amsat.org) or by writing a check or M.O. payable to "George Heron, N2APB" and sending to:

George Heron, N2APB
2419 Feather Mae Ct
Forest Hill, MD 21050

AVAILABILITY

Production pc boards are on order and kitting will begin when they are received, expected on Dec 30. Shipping will then begin in early January.

Thanks, and be sure to check out the PIC-EL photos on the project web page at www.amqrp.org/elmer160/board

73,

from the PIC-EL Design Team:
George N2APB, Craig AA0ZZ,
John, WB8RCR and Joe N2CX

See the "PIC Elmer 160" course at ...
<http://www.amqrp.org/elmer160>

Date: Sat, 13 Dec 2003 00:16:16 -0500
From: "Jason Hsu" <jhs001@heronetwork.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [162975] DC amplifier with <35 ohms output impedance
Message-ID: <001b01c3c138\$3df1ec20\$64923144@aoldsl.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I'm trying to design a DC amplifier with less than 35 ohms of output resistance. I need such a low output impedance, as the load is only about 700 ohms.

The design I've been trying to make work is an LM324 op amp. The amplification part is easy enough. Minimizing the output resistance is the hard part. Although I tried using the classic noninverting buffer amplifier for the last stage (input into + input port, output port connected to - input port), but the output resistance I'm measuring (open circuit voltage divided by short circuit current) is a whopping 84 ohms!

What gives? I thought the output resistance of most op amps is on the order of 100 ohms. Using a voltage follower circuit in the last stage is supposed to reduce the output resistance by a factor of A, in which A is the open-loop amplification, which is at least 100,000 at DC.

Has anyone here done what I'm trying to do?

Jason Hsu, AG4DG
personal@jasonhsu.com

Date: Sat, 13 Dec 2003 00:35:41 EST
From: W0rw@aol.com
To: hfpack@yahooogroups.com, ppraanet@mailman.qth.net, qrp-1@lehigh.edu,
 shmrq@piobaire.mines.uidaho.edu, Kg5nnick@cs.com
Subject: [162976] KX1 #292 is alive
Message-ID: <143.1e24d0a5.2d0bfff2d@aol.com>
MIME-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

This is an awesome radio...Just finshed it today...Contacts all over the US.
Just worked Doc, K0EVZ on 40M.
When it warms up i will take it out backpacking,
This is a pocket-pack radio (9 0z), no more 25 pound back pack radio.
Paul w0rw

Thanks for the great design, Wayne...
If you don't know what a KX1 is check out QST Dec p151.
or www.elecrafter.com.

Date: Fri, 12 Dec 2003 23:23:52 -0700
From: "Ron KU7Y" <ku7y@tds.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [162977] Re: Fox Hunt Questions
Message-ID: <007101c3c141\$b4c8cf40\$35910b45@ku7y>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Karl and All,

Hmmmmmm, I don't see anything wrong with Karl getting an idea of how many people would like to see a change. Should there be enough good input to him, I'd just about bet a cup of coffee that he would share the data with who ever is doing the Fox Hunts.

Anyone want to bet on Change vs. No Change?

: -)

OK, back in my hole.....

73,

Ron, KU7Y
ku7y@qsl.net
Brenda, AZ (or somewhere close!)
<http://www.qsl.net/ku7y>
<http://www.BrendaJamFest.com>

Date: Sat, 13 Dec 2003 02:20:05 -0500
From: Steven Weber <kd1jv@moose.ncia.net>
To: "Jason Hsu" <reply@jasonhsu.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [162978] Re: DC amplifier with <35 ohms output impedance
Message-ID: <3.0.6.32.20031213022005.007b2cd0@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>I'm trying to design a DC amplifier with less than 35 ohms of output
>resistance. I need such a low output impedance, as the load is only about
>700 ohms.

>
Jason,

You need to look at the output current the op amp is capable of supplying.
>From that you can determine how much voltage swing you can expect for a
given load. The LM324 will start to peter out at about 10 ma. This is
typical for most "generic" op amps.

If your load is DC coupled to the output of the amplifier, a significant
amount of the output current can be used up biasing the load to whatever the
no signal output level of the amplifier is. (assuming a single ended supply)

If the load is DC coupled to the output of the amplifier, adding a NPN
emitter follower to the output of the op amp (and inside the feedback loop)
can dramatically increase your output current capability and reduce the
amount of power dissipated in the op amp package.

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
<http://www.qsl.net/kd1jv/>

Date: Sat, 13 Dec 2003 13:57:22 +0300
From: "Oleg V. Borodin" <master72@lipetsk.ru>
To: Karl Larsen <k5di@zianet.com>
Cc: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [162979] Re[2]: Single wire feed Windom?
Message-ID: <1072310530.20031213135722@lipetsk.ru>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Dear OM Karl!

KL> A long time ago I used the classic Windom antenna. It was 134
KL> feet of wire fed 30% from the close end with a single wire of no
KL> particular length.

IMHO, this is named "VS1AA" antenna?

Wish you all the best!

72! de RV3GM Oleg ("Master-72") V. Borodin

<http://ruqrp.narod.ru>

=== In QRP We Trust! ===

Date: Sat, 13 Dec 2003 07:00:34 -0500
From: "Walt Amos" <waltk8cvamos@aaahawk.com>
To: "Qrp-L Mail" <qrp-l@lehigh.edu>
Subject: [162980] The great 80 meter test
Message-ID: <000b01c3c170\$bbc51860\$49c83f40@WALTK8CV>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Gang:

I have been checking into the Michigan 80 meter qrp net for some time. We get checkins from the east coast , and the mid west but not much farther out. I tried to check in from a rental house in Florida where I could hear the net quite well but they could tell someone was there but could not read my 817 and draped dipole antenna that was outside but not up high and in the clear. So , if the fox is in COLORADO and on 80 the, HOT BED OF QRP will have fun, but the rest of us will find it worse off than 40 meters. But that is what QRP is all about, hope burns ETERNAL in the hearts of QRPERS :-)

Walt K8CV Royal Oak, MI.

Date: Sat, 13 Dec 2003 05:54:05 -0700 (MST)
From: Karl Larsen <k5di@zianet.com>

To: "Oleg V. Borodin" <master72@lipetsk.ru>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [162981] Re[2]: Single wire feed Windom?
Message-ID: <Pine.LNX.4.44.0312130550500.4692-100000@bucket.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 13 Dec 2003, Oleg V. Borodin wrote:

> Dear OM Karl!
>
> KL> A long time ago I used the classic Windom antenna. It was 134
> KL> feet of wire fed 30% from the close end with a single wire of no
> KL> particular length.
>
> IMHO, this is named "VS1AA" antenna?

Hi Oleg, I never heard it called a VS1AA antenna. I found it in the 1952 ARRL Antenna Book and it was called a Windom, I think named for a Ham who used it. It was a good antenna but you had to find a good ground!

>
> Wish you all the best!
> 72! de RV3GM Oleg ("Master-72") V. Borodin
> <http://ruqrp.narod.ru>
>
> === In QRP We Trust! ===
>
>

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

Date: Sat, 13 Dec 2003 06:48:32 -0700
From: "Bruce Kizerian" <kizerian@xmission.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [162982] Re: DC amplifier with <35 ohms output impedance
Message-ID: <000b01c3c17f\$cc55faa0\$fa0746a6@98seoem>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Jason

The ST microelectronics TS922 is designed to drive 80 mA into 32 ohms. I have used these to drive small electric motors. They will swing closer to the rail at 30mA than anything else I tried. The TS921 is the single amp version. There is also a TS924 quad version. You can get them from Mouser. They are not expensive.

They were designed as a multiuse audio amplifier and will drive stereo headphones nicely. I plan on using them in future regen radio projects as an audio amplifier.

Hope this helps

Bruce kk7zz
www.elmerdude.com

Date: Sat, 13 Dec 2003 07:51:34 -0800
From: "Nick Kennedy" <wa5bdu@tcainternet.com>
To: "'Jason Hsu'" <reply@jasonhsu.com>,
 "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [162983] RE: [qrp-1] DC amplifier with <35 ohms output impedance
Message-ID: <000501c3c190\$fbf0a790\$04000000a@wa5bdu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I'd have to answer a question with a question. Why do you need 35 ohms output resistance? Is there a certain voltage swing you need to maintain to a 700 ohm load?

The 'short circuit current' method is a good theoretical method for an ideal source with real internal resistance included, but it might not work so well with complex devices that have limiting circuit built in, to deal with shorts. A better method is to use two measurements with two known resistances, and calculate from there. Since you are using a 700 ohm loads, try resistances of say, 680 and 820 and measure the voltages, then calculate the internal resistance from the four known parameters.

Which leads to another question ... do you need the 'actual' internal resistance, or its effective value? This leads to no end of arguments on rec.radio.amateur.antenna, because the negative feedback of your

op-amp circuit will, or should, make the output resistance look very close to zero. Which is normally what you want.

I can only think of a couple reasons you would want the 'real' internal resistance. One would be if you want to calculate and control the package dissipation. But you can really handle that by staying within the limitations of the data sheet. Another would be that you intend to "match" the load to the source resistance. Which is a bad idea, since it guarantees a high device dissipation.

But assuming you truly need that 35 ohms (or is it 35 ohms max?) source resistance, I think you'll need a transistor follower. So another question--is your circuit bipolar (swings positive and negative) or single ended? If single ended, you should be able to use a simple emitter follower. If it goes both ways, you'll probably need a two transistor circuit.

72 & good luck,

Nick, WA5BDU

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of Jason Hsu

Sent: Friday, December 12, 2003 9:16 PM

To: Low Power Amateur Radio Discussion

Subject: [qrp-l] DC amplifier with <35 ohms output impedance

I'm trying to design a DC amplifier with less than 35 ohms of output resistance. I need such a low output impedance, as the load is only about 700 ohms.

Jason Hsu, AG4DG
personal@jasonhsu.com

Date: Sat, 13 Dec 2003 09:15:48 -0500

From: Ed Tanton <n4xy@earthlink.net>

To: QRP-L <qrp-l@lehigh.edu>

Subject: [162984] DC Amp...

Message-ID: <6.0.0.22.2.20031213091528.01ea64d8@pop.earthlink.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

Why not try one of the usual audio amps like an LM386 or LM380? Admittedly they usually use a series output cap, but it may not be necessary for this application.

72/73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

"He that gives up a little liberty to gain
temporary security will lose both and
deserve neither".
--Benjamin Franklin

"Suppose you were an idiot ...
and suppose you were a member of
Congress... but I repeat myself."
--Mark Twain

Date: Sat, 13 Dec 2003 09:21:06 -0500
From: Ed Tanton <n4xy@earthlink.net>
To: noga <nogaqrp@mailman.qth.net>, QRP-L <qrp-l@lehigh.edu>
Subject: [162985] Fwd: Saturn Rings in the New Year
Message-ID: <6.0.0.22.2.20031213091953.01f18648@pop.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

>Subject: Saturn Rings in the New Year
>To: "NASA Science News" <snglist@snglist.msfc.nasa.gov>
>

>
>NASA Science News for December 12, 2003
>
>Earth is approaching Saturn for our closest encounter with the ringed
>planet in decades. The best time to look: when the clock strikes midnight
>on New Year's Eve.
>
>FULL STORY at
>
>http://science.nasa.gov/headlines/y2003/12dec_saturn.htm?list839287
>
>
>Check out our RSS feed at <http://science.nasa.gov/rss.xml>!
>
>
>Home page: <http://science.nasa.gov>

72/73 Ed Tanton N4XY <n4xy@earthlink.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

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SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

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Congress... but I repeat myself."
--Mark Twain

Date: Sat, 13 Dec 2003 08:39:42 -0600
From: Chuck Carpenter <w5usj@9plus.net>
To: qrp-l@lehigh.edu, 50mhz@topica.com, vhf@w6yx.stanford.edu
Subject: [162986] FT-857 Neat Tuning Indicator
Message-ID: <3.0.2.32.20031213083942.0069e95c@mail.9plus.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

This is a really neat feature of the New Yaesu FT-857 rig.

An LED on the panel blinks blue when the CW station your listening to is tuned to the pitch you selected for the CW tone. Quite narrow too like about 25 Hz. Maybe not something you'd run out and buy the rig for but nice if you do buy one. And quite useful for those of us who don't have perfect pitch. The DSP works much better than other rigs like the IC-706 I sold to get this one. The frequency coverage is pretty good and even covers the new 60 meter band without making any mods.

All in all, I like it much much better than the IC-706 MKII G. Good deals at HRO for Christmas too.

Chuck Carpenter, W5USJ, Point, Rains Co., TX - EM22cv, NETXQRP #1
QRP-ARCI #5422, QRP-L #1306, QRPp-I #115, ARS #1280, SOC #57
Zombie #759, COG #11, 6 Club #201, FP #601 <http://www.netxqrp.org>

Date: Sat, 13 Dec 2003 09:44:30 -0500
From: "E. Roswell" <eroswell@monmouth.com>
To: qrp-l@Lehigh.EDU
Subject: [162987] ScQRPion Paddle Dimensions
Message-ID: <3FDB25CE.40905@monmouth.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Could someone post the overall dimensions (cube) for the finished paddle? Since I have to wait for mine, I thought I would build a small travel case for it, wherein it fits snugly inside. So the overall length and height (including plastic finger tips, but excluding connecting cable) are needed.
73, Ed, K2MGM.

Date: Sat, 13 Dec 2003 09:16:32 -0600
From: "Jim Sheldon" <w0eb@cox.net>

To: "Flying Pigs Mailing List" <fpqrp-1@mpna.com>,
"Four States QRP Group" <4sqrp@mailman.qth.net>,
Subject: [162988] FS: Small Wonder Labs SW80+
Message-ID: <IBEGLCMLCDHHEFLBPHBOGEGOCPAA.w0eb@cox.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have one Small Wonder Labs SW80+ that's surplus to my needs at this time. It's built, and in the SWL enclosure kit. It's set for the frequency range 3.530 to 3.570 (actual measured frequencies are 3.532 to 3.572) Measured output is between 2.8 and 3.0 watts over the entire range on 13.8 volts. Receiver sensitivity is measured (using an IFR-1200 service monitor) at .15 microvolt for 12db SINAD and it will recover useable audio on signals at .1 microvolt or less depending on band noise. No clicks or thumps in the QSK and the rig is very temperature stable. I've made many enjoyable contacts with this rig using a dipole up 35 feet. The rig is less than 3 months old. Asking \$65.00 shipped anywhere in the US. Prefer PayPal but will accept check or money order. Here's your chance to get a good QRP rig for the foxhunts on 80 if/when they have them, hi hi.

Serious inquiries only, replies off list please to conserve BW.

Jim, W0EB
w0eb@cox.net

Date: Sat, 13 Dec 2003 08:20:19 -0700
From: "Thomas Kuehl" <ac7a@earthlink.net>
To: "Jason Hsu" <reply@jasonhsu.com>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [162989] Re: DC amplifier with <35 ohms output impedance
Message-ID: <001501c3c18c\$9ec8fc60\$120110ac@texas6oef4glwm>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Jason,

The closed-loop output impedance of an operational amplifier is normally very low, often fractions of an ohm. It is lowest where the amplifier's open-loop gain is maximum. Even though the open-loop output impedance may be on the order of the 100 ohms as

you mentioned, it rapidly falls to a very small value when the loop is closed. Most operational amplifier's output stage consists of a complementary NPN/PNP pair connected in an emitter follower configuration. This is inherently a low impedance configuration. In such cases the output impedance is essentially the open-loop output impedance of the emitter follower divided by the loop gain.

I am not sure where you found that the output impedance is the "open circuit voltage divided by the short circuit current." I have never seen it defined as such before. Op-amp's have an output compliance range where they can supply their specified output current, over the linear voltage output range. At a point dictated by design they begin to current limit. An extreme condition is where the output is shorted and they deliver short-circuit current. The output device sinking or sourcing the current is operating under full collector-emitter voltage, a full power dissipation condition, and outside the range of normal range of linear operation. This is not where one normally defines output impedance.

Open circuit output voltage is usually intended to mean the maximum linear operating output voltage in an unloaded condition. Because open-loop gain is highest in the unloaded condition, output impedance is minimum.

The output impedance can readily be determined using a network analyzer, but most of us don't have one available. Another method that work well employs measuring the open-loop gain, without and then with a specified load - a load that maintains linear operation. There is an equation that produces the closed-loop output impedance:

$$R_o = [(A_{ol} / A'_{ol}) - 1] * R_l$$

where: A_{ol} is the unloaded open-loop gain
 A'_{ol} is the loaded open-loop gain
 R_l is the load resistance, usually selected to reduce A_{ol} by about -6db

This is derived in, "Function Circuits, Design and Applications," Wong and

Ott, Burr-Brown
Corporation, 1976.

Regards, Thomas - AC7A (Tucson)

----- Original Message -----

From: "Jason Hsu" <jhs001@heronetwork.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Friday, December 12, 2003 10:16 PM
Subject: DC amplifier with <35 ohms output impedance

> I'm trying to design a DC amplifier with less than 35 ohms of output
> resistance. I need such a low output impedance, as the load is only about
> 700 ohms.
>
> The design I've been trying to make work is an LM324 op amp. The
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> hard part. Although I tried using the classic noninverting buffer
amplifier
> for the last stage (input into + input port, output port connected to -
> input port), but the output resistance I'm measuring (open circuit voltage
> divided by short circuit current) is a whopping 84 ohms!
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> of 100 ohms. Using a voltage follower circuit in the last stage is
supposed
> to reduce the output resistance by a factor of A, in which A is the
> open-loop amplification, which is at least 100,000 at DC.
>
> Has anyone here done what I'm trying to do?
>
> Jason Hsu, AG4DG
> personal@jasonhsu.com
>

Date: Sat, 13 Dec 2003 10:45:00 -0500
From: "Jason Hsu" <jhs001@heronetwork.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [162990] Re: DC amplifier with <35 ohms output impedance
Message-ID: <005001c3c190\$13b6bbe0\$64923144@aolds1.net>
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thanks for your suggestions. However, it seems I haven't told you enough about what I'm trying to do.

Let me tell you more about what I'm trying to do. I need the DC amplifier for a T/R sensing circuit. The power supply is 12V-14V. The relay is the DS2Y, which has about a 700-ohm coil. One side of the coil has the power supply, and the opposite side of the coil is the voltage driving the relay switch. This node is connected to the output of the DC amplifier.

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Jason Hsu, AG4DG
personal@jasonhsu.com

Date: Sat, 13 Dec 2003 11:01:03 -0500
From: "Joseph Trombino Jr" <w2kj@bellsouth.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [162991] 80m Fox hunts et al
Message-ID: <005701c3c192\$4fc80380\$220110ac@gateway.2wire.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Howdy Gang:

With all the talk of having the Fox hunts on 80m lately I would sure like to see more activity in general on 80m CW.

I believe Wayne Burdick proposed much the same thing a while back in terms

of getting more OPS on 80m CW.

Do we have any 80m contests or sprints during the year??? Maybe we need a sprint or two on 80m to stimulate more interest???

Just a thought...I tune over the band from time to time and hear little if no activity. Such a shame to see so much spectrum not utilized much.

Will be looking for CW OPS around 3560Khz in the next few days to see if any interest is generated.

73, Joe W2KJ
North Carolina
I QRP, therefore I am

Date: Sat, 13 Dec 2003 10:08:07 -0600
From: "Jim Sheldon" <w0eb@cox.net>
To: "Four States QRP Group" <4sqrp@mailman.qth.net>,
"Flying Pigs Mailing List" <fpqrp-l@mpna.com>,
Subject: [162992] RE: FS: SW80+
Message-ID: <IBEGLCMLCDHHEFLBPHBOMEHACPAA.w0eb@cox.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The SW80+ has been spoken for and also the SW30+ I offered a few days ago.

Jim - W0EB

Date: Sat, 13 Dec 2003 10:10:49 -0600
From: Chuck Carpenter <w5usj@9plus.net>
To: qrp-l@lehigh.edu
Subject: [162993] [FS] Emdbd Rsch EPS-1 DC/DC Conv.
Message-ID: <3.0.2.32.20031213101049.00694fc8@mail.9plus.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

For Sale:

Embedded Research EPS-1: The Essential Power Supply-1

DC to DC converter 4.5 V to 12 V in and 12 V out. Mods on web (someplace?) for more DC out -- about 13.8 or so as I recall.

Mounted in a hobby box that includes a 4-Cell D Cell holder with a subminiature on/off switch. Could use an LED to indicate power on.

\$20 box shipped to any USPS address. Excess gadget that I just plain don't use.

Chuck Carpenter, W5USJ, Point, Rains Co., TX - EM22cv, NETXQRP #1
QRP-ARCI #5422, QRP-L #1306, QRPp-I #115, ARS #1280, SOC #57
Zombie #759, COG #11, 6 Club #201, FP #601 <http://www.netxqrp.org>

Date: Sat, 13 Dec 2003 11:12:48 -0500
From: "Armin Hachmer" <armin@muskoka.com>
To: "QRP-L" <qrp-l@Lehigh.EDU>,
"QRP-Canada" <qrp-canada@neale.gpfn.sk.ca>
Subject: [162994] Hello? Hello? CQ 10m
Message-ID: <005101c3c193\$f4125020\$326c7bd8@muskoka.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

am i the only one hearing NOTHING
on 10m for the ARRL contest ?

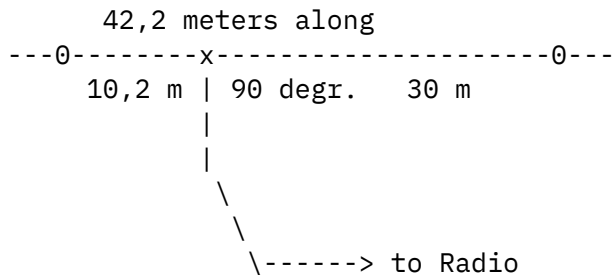
Date: Sat, 13 Dec 2003 19:27:36 +0300
From: "Oleg V. Borodin" <master72@lipetsk.ru>
To: Karl Larsen <k5di@zianet.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [162995] Re[3]: Single wire feed Windom?
Message-ID: <1942795907.20031213192736@lipetsk.ru>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dear OM Karl!

KL> Hi Oleg, I never heard it called a VS1AA antenna. I found it in
KL> the 1952 ARRL Antenna Book and it was called a Windom, I think named for
KL> a Ham who used it. It was a good antenna but you had to find a good
KL> ground!

As well as any antenna :-)

When I was beginner SWL in 70-th, our local old Amateurs named this ant as "VS1AA" and sometime as "AmericAnka" (like "American Lady" in English translation)-Hi. True, it is a good enough, simple, wide band antenna. I remember, the fed wire must be connected to the main wire with a right angle a few meters along:



That is, if my memory isn't error :-)

Wish you all the best!

72! de RV3GM Oleg ("Master-72") V. Borodin

<http://ruqrp.narod.ru>

=== In QRP We Trust! ===

Date: Sat, 13 Dec 2003 11:42:19 -0500
From: "Ken La Rose" <kenlar@csolve.net>
To: <qrp-l@Lehigh.EDU>, "QRP-Canada" <qrp-canada@neale.gpfn.sk.ca>
Cc: "Tom Hamblin" <hamblin@mirusinternational.com>,
"Tom Curtola" <tcurtola@rogers.com>,
Subject: [162996] Sunday Morning SSB/CW QRP Net
Message-ID: <002401c3c198\$13e80b70\$b59fc018@D1YQV721>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Greetings!

Just a reminder, tune to 7.067 MHz plus or minus, tomorrow at 9:30 AM local, 1430UTC and check-in to our weekly QRP gathering.

Thanks to Earl VA6RF, Bruce VE5RC, and Ron WB3AAL for trying last week. I'd like to encourage stations not copying me, to break in if they can hear a

net participant. Then if someone on frequency can make an exchange, and relay the info, we will all stand-by for you. Also, I will endeavour to listen closer, and tune around more, to try and pull in all callers.

Thanks for your continued support of this informal meet. It's lots of fun to experience the QRP/SSB/CW mixture on-the-air. Everyone welcome!

72,

de Ken VE3ELA, NCS

Date: Sat, 13 Dec 2003 10:52:44 -0800
From: "Nick Kennedy" <wa5bdu@tcainternet.com>
To: "'Jason Hsu'" <reply@jasonhsu.com>,
 "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [162997] RE: [qrp-1] Re: DC amplifier with <35 ohms output impedance
Message-ID: <000401c3c1aa\$4b755e50\$0400000a@wa5bdu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hello Jason-

More confusion.

Is the "relay switch" another component, or is it the relay coil again?

Do you want the op-amp to source or sink current? It sounds like "sink", since you are connecting one side of the relay coil to supply voltage. So your op-amp would need to be able to sink 12V / 700 ohms or 17 ma. You should probably be able to come up with something that would do that, or add a small transistor and let the op-amp turn it on. Actually, you should be able to eliminate the op-amp and just let the rectified RF sample turn on the transistor.

In a T/R circuit I use for my boatanchor separate TX/RX combinations, I use the circuit of figure 88, Solid State Design for the Radio Amateur as the RF sensing circuit, then add the 555 timer to control the relay and provide some T/R "hold" delay.

If you use the op-amp, you're really not using it as an amplifier, but more like a comparator. It's either on or off; high or low. You could call it an amplifier with high enough gain to drive the output to the

rail with very small input voltages.

72--Nick, WA5BDU

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of Jason Hsu

Sent: Saturday, December 13, 2003 7:45 AM

To: Low Power Amateur Radio Discussion

Subject: [qrp-1] Re: DC amplifier with <35 ohms output impedance

Thanks for your suggestions. However, it seems I haven't told you enough about what I'm trying to do.

Let me tell you more about what I'm trying to do. I need the DC amplifier for a T/R sensing circuit. The power supply is 12V-14V. The relay is the DS2Y, which has about a 700-ohm coil. One side of the coil has the power supply, and the opposite side of the coil is the voltage driving the relay switch. This node is connected to the output of the DC amplifier.

A rectifying circuit samples the transmitter voltage and inputs it into the DC amplifier. The DC amplifier is to provide a gain of 100. (10mV becomes 1V, 100mV becomes 10V. 0V becomes .5V-1V due to the offset voltage.)

The problem is that having only 700 ohms between the DC amplifier output and the power supply artificially inflates the DC amplifier output. Having 0V input becomes more like 1.5V output, even WITH a voltage follower in the last stage. No, this is NOT because of the offset voltage, as having an open between the DC amplifier output and power supply brings down the DC amplifier output voltage to the desired low level. So it's obvious to me that my DC amplifier impedance is too high relative to the 700-ohm output.

Jason Hsu, AG4DG
personal@jasonhsu.com

Date: Sat, 13 Dec 2003 08:52:53 -0800
From: John Kuklewicz N7ZN <kuk1@cybrquest.com>

To: Jason Hsu <reply@jasonhsu.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [162998] Re: DC amplifier with <35 ohms output impedance
Message-ID: <3FDB43E5.70604@cybrquest.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Jason, please allow me to make some observations.

First, please correct me if I am mistaken, but it sounds like you wish the relay to be closed (current flowing through the coil) when the transmitter is not transmitting.

Secondly, from the desired operation you describe, what you really want here is a comparator. While the LM324 can be used as a comparator, it is not a very good one. (Limited slew rate being one of the major problems.)

I have already deleted your original post, but IIRC you are using the LM324?

Third, what you are running into is the negative voltage compliance limit of the op amp combined with asking the poor thing to output much more current than it is designed for. (The specified linear range output current for the '324 is around 10mA.) Your 700 ohm load is asking for around 15mA. Consequently ohmic resistances within the opamp are increasing the output voltage above and beyond the minimum compliance voltage, which would be around 1 volt.

Might I suggest the following:

- redesign the relay driver circuit to operate as a comparator not a gain of 100 voltage amplifier.
- arrange the comparator inputs so that the output is high when the relay is to be closed.
- use an N-channel MOSFET to drive the relay. This should easily pull your relay coil to ground.
- consider using a real comparator instead of an opamp. The LM339 type of circuit is one example. These have an open collector output which will make driving your MOSFET quite simple.
- use some diodes to limit the output swing of the comparator so as to speed up the transitions. (slew rate limitations)

I hope this helps. Feel free to ask further questions.

vy 73 es gl with your project.

John N7ZN

Jason Hsu wrote:

> Thanks for your suggestions. However, it seems I haven't told you enough
> about what I'm trying to do.
>
> Let me tell you more about what I'm trying to do. I need the DC amplifier
> for a T/R sensing circuit. The power supply is 12V-14V. The relay is the
> DS2Y, which has about a 700-ohm coil. One side of the coil has the power
> supply, and the opposite side of the coil is the voltage driving the relay
> switch. This node is connected to the output of the DC amplifier.
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> A rectifying circuit samples the transmitter voltage and inputs it into the
> DC amplifier. The DC amplifier is to provide a gain of 100. (10mV becomes
> 1V, 100mV becomes 10V. 0V becomes .5V-1V due to the offset voltage.)
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> the power supply artificially inflates the DC amplifier output. Having 0V
> input becomes more like 1.5V output, even WITH a voltage follower in the
> last stage. No, this is NOT because of the offset voltage, as having an
> open between the DC amplifier output and power supply brings down the DC
> amplifier output voltage to the desired low level. So it's obvious to me
> that my DC amplifier impedance is too high relative to the 700-ohm output.
>
>
>
> Jason Hsu, AG4DG
> personal@jasonhsu.com
>

Date: Sat, 13 Dec 2003 12:02:26 -0500
From: W2BJ <barry@w2bj.com>
To: Weymouth Walker <weymouth1@adelphia.net>,
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [162999] Re: Protection For The KX1 ...
Message-ID: <BC00B052.726%barry@w2bj.com>
Mime-version: 1.0

Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

On 12/7/03 10:14 PM, "Weymouth Walker" <weymouth1@adelphia.net> wrote:

> My KX1 (s/n 104) is on the air and working A-OK ... Although I am not a
> hiker or back-packer, I frequently operate from week-end rental cabins,
> hotel rooms, and other locations away from home ... I have adapted a
> Pelican 1120 case for carrying and protecting my KX1 (s/n 104) ...
> pictures and a zip file can be found at
>
> <http://weywalker.home.mindspring.com/>
>
> Pelican cases & prices (I have no affiliation) can be viewed at
>
> <http://www.all-pelican-cases-4-less.com/>

Hi Weymouth,
Thanks for the good information and pictures. I just ordered a case for
mine.
73/72,
Barry, W2BJ

Date: Sat, 13 Dec 2003 12:07:59 -0500
From: "Brian Riley (maillist)" <n1bq_list@wulfden.org>
To: Armin Hachmer <armin@muskoka.com>,
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [163000] Re: Hello? Hello? CQ 10m
Message-ID: <BC00B19F.1B31D%n1bq_list@wulfden.org>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

I have been working the Caribbean and SA since 1400z, and Texans started
showing up in droves about 1600z. I am running a 10meter verticla and a
DX-77 turned down for QRP

cheers 73 de brian, n1bq

On 12/13/03 11:12 AM, "Armin Hachmer" <armin@muskoka.com> wrote:

> am i the only one hearing NOTHING

> on 10m for the ARRL contest ?
>

Date: Sat, 13 Dec 2003 09:06:18 -0800
From: "PHILIP DECAIRE" <pedecaire@email.msn.com>
To: <qrp-1@Lehigh.EDU>
Subject: [163001] Re: DC amplifier with <35 ohms output impedance
Message-ID: <001101c3c19b\$6e00be60\$75512a43@grape>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Jason -

Sounds like what you really need is a relay driver switch,
not a linear amplifier operating your relay.

The opamp will only pull down so much current, and some
opamps (such as the LM324) won't pull very much current very
close to ground. Even at microamp loads the LM324 won't
pull closer than about a volt to ground. Yeah, I know the
data sheet says it will go to ground, but that's only at a
really miniscule load - I didn't know how it worked till I
put it in a circuit where it needed to pull down close to
ground!

Does the critter work? As long as your relay pulls in like
it should, the output voltage of the opamp may be a moot
point. You're obviously trying to understand the behavior
of the circuit, and its not doing what you thought it should
be doing, but if it functions it may be good enough!

You're probably putting more stress on the opamp than you
need to. It would be better to drive a switch transistor.
For a low-side switch you'd need an NPN switching
transistor, and in order to get the logic right to drive it,
you'd have to have an intermediate "inverter" switch. Easy,
simple circuits but it ups the parts count and complexity.
If you have any of the opamp sections unused, you could
configure one of those as an inverter to drive a 2N3904,
2N2222, 2N4401, etc. as a switch. A base resistance of
about 10k will give you about a mil of base drive. The
transistor will saturate and should have something like 100
millivolts or less of voltage drop.

As for the output impedance of the opamp circuit, it will be very low only if the opamp isn't saturated or current limited. The reduction of output impedance due to negative feedback applies only with the device operating in the linear range. As others have already pointed out, most opamps have current limiting to protect the output stage, so the short circuit output current has no relationship to the linear output impedance.

Playing with parts like this, as well as being just plain good fun, is a very good way to learn some of these circuit and part complexities. Keep on doing it!

72's, Phil WB7AEI

Date: Sat, 13 Dec 2003 11:21:35 -0600
From: "Brian Olson" <brolson@ties.k12.mn.us>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [163002] For Sale QPP stuff
Message-ID: <NDBBJPBMGLKJGANKJAEJMECDHEAA.brolson@ties.k12.mn.us>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Greetings the following is for sale unbuilt:
all sealed and unopened original parts bags

AT Sprint by KD1JV
40/30/20 meters
4 watts out
very small

SW+ 20 meter kit

The Epiphyte 3
75 meter SSB Transceiver kit

NorCal 38 SPECIAL
30 meter transceiver kit

Sell or trade (I will look a possible trades first)
Please contact off the list - Thank you

Brian R. Olson
N0XFE
Bloomington, MN

Date: Sat, 13 Dec 2003 12:25:17 -0500
From: "Russ Hines" <wb8zcc@fuse.net>
To: "Jason Hsu" <reply@jasonhsu.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [163003] Re: DC amplifier with <35 ohms output impedance
Message-ID: <003b01c3c19e\$139e97a0\$4407c00a@WB8ZCC2>

Okay, here's my two cents:

Sounds like you're asking an op-amp to sink about 20mA of current to engage the relay... doable, certainly, but seems like it would be easier to use an NPN transistor.

Try manipulating the gains a bit, ie., set up a stage before the relay as a unity-gain inverter and drop the gain of your amp stage, or increase your rectified xmtr sample.

Good luck.

73,
Russ
WB8ZCC

----- Original Message -----
From: "Jason Hsu" <jhs001@heronetwork.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Saturday, December 13, 2003 10:45 AM
Subject: Re: DC amplifier with <35 ohms output impedance

> Thanks for your suggestions. However, it seems I haven't told you enough
> about what I'm trying to do.
>
> Let me tell you more about what I'm trying to do. I need the DC amplifier
> for a T/R sensing circuit. The power supply is 12V-14V. The relay is the
> DS2Y, which has about a 700-ohm coil. One side of the coil has the power
> supply, and the opposite side of the coil is the voltage driving the relay
> switch. This node is connected to the output of the DC amplifier.
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> A rectifying circuit samples the transmitter voltage and inputs it into the
> DC amplifier. The DC amplifier is to provide a gain of 100. (10mV becomes
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> last stage. No, this is NOT because of the offset voltage, as having an
> open between the DC amplifier output and power supply brings down the DC
> amplifier output voltage to the desired low level. So it's obvious to me
> that my DC amplifier impedance is too high relative to the 700-ohm output.
>
>
>
> Jason Hsu, AG4DG
> personal@jasonhsu.com
>
>

Date: Sat, 13 Dec 2003 12:29:31 -0500
From: "Emmersome Bigguns" <n8ie@woh.rr.com>
To: "QRP-1" <qrp-1@lehigh.edu>, "Armin Hachmer" <armin@muskoka.com>
Subject: [163004] RE: Hello? Hello? CQ 10m
Message-ID: <MMEDLKDLOJAOAIGICDJACEGGFDAA.n8ie@woh.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Your not alone brother, here in SW Ohio it's mostly TX

72, oo
Dan, N8IE

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of
Armin Hachmer
Sent: Saturday, December 13, 2003 11:13 AM
To: Low Power Amateur Radio Discussion

Subject: Hello? Hello? CQ 10m

am i the only one hearing NOTHING
on 10m for the ARRL contest ?

Incoming mail is certified Virus Free.
Checked by AVG anti-virus system (<http://www.grisoft.com>).
Version: 6.0.544 / Virus Database: 338 - Release Date: 11/25/2003

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (<http://www.grisoft.com>).
Version: 6.0.544 / Virus Database: 338 - Release Date: 11/25/2003

Date: Sat, 13 Dec 2003 12:42:33 -0500
From: "John Shannon" <jsk3wwp@alltel.net>
To: "QRP Mail List" <qrp-l@lehigh.edu>
Subject: [163005] Re: Hello? Hello? CQ 10m
Message-ID: <001201c3c1a0\$8aafa1c0\$287466a6@alltel.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> am i the only one hearing NOTHING
> on 10m for the ARRL contest ?

Well, I heard K5GO at 549 calling CQ with very few answers - that's all I
heard here in PA at 1600Z.

This is a contest for the KW and beam boys, not us minimal QRPers in a
valley.

With the SF in the 80's and moderately high K/A index, it's not likely to
get any better later today or tomorrow either.

Check the Propagation section of my website for the daily SF numbers and the
K index updated every 3 hours.

GL in the contest. You may win something in the QRP category with just a
very few contacts if you persist. Me, I'm not going to bother. Too many
other things to do that don't involve sitting and tuning across a virtually
dead band.

~~~~~  
73 - John, K3WWP - 100% CW & QRP  
using simple wire antennas.

<http://home.alltel.net/johnshan/>

My website is now in its eighth year  
of operation and includes the following:

DX QSL Routes \*\* Operating Tips  
QRP Rigs Info \*\* CW Contest Calendar  
Daily Propagation Info \*\* Your CW Stories  
Teens and CW \*\* Monthly polls  
Categorized Quality Links \*\* MUCH MORE

If you love Morse Code, please join the  
FISTS club - <http://www.fists.org>  
I'm proud to be FISTS # 2002

~~~~~

Date: Sat, 13 Dec 2003 12:44:52 -0500
From: Jim Lyons <lyons@canada.com>
To: "Oleg V. Borodin" <master72@lipetsk.ru>,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [163006] Re: Re[3]: Single wire feed Windom?
Message-ID: <jbm.20031213124452.db381515@Sigi>
Content-transfer-encoding: 7BIT

> Date: Sat, 13 Dec 2003 19:27:36 +0300
> From: "Oleg V. Borodin" <master72@lipetsk.ru>
> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
> ReplyTo: "Oleg V. Borodin" <master72@lipetsk.ru>
> Subject: Re[3]: Single wire feed Windom?
>
> Dear OM Karl!
>
> KL> Hi Oleg, I never heard it called a VS1AA antenna. I found it
> in KL> the 1952 ARRL Antenna Book and it was called a Windom, I think
> named for KL> a Ham who used it. It was a good antenna but you had to
> find a good KL> ground!
>
> As well as any antenna :-)
>
> When I was beginner SWL in 70-th, our local old Amateurs named this ant
> as "VS1AA" and sometime as "AmericAnka" (like "American Lady" in English

> translation)-Hi. True, it is a good enough, simple, wide band antenna. I
> remember, the fed wire must be connected to the main wire with a right
> angle a few meters along:
>
> 42,2 meters along
> ---0-----x-----0---
> 10,2 m | 90 degr. 30 m
> |
> |
> \
> \-----> to Radio
>
> That is, if my memory isn't error :-)
>
> Wish you all the best!
> 72! de RV3GM Oleg ("Master-72") V. Borodin
> <http://ruqrp.narod.ru>
>
> === In QRP We Trust! ===

Jim Macintosh, VS1AA, later GM3IAA but now SK was the inventor of the antenna. The single wire feeder was supposed to be a different guage (thinner) than the top. I remember visting Jim many many years ago at his home in Inverness, Scotland and he had several of the antennas installed between neighbouring buildings.

Jim Lyons, VE2KN, ex-GM3GUJ

Date: Sat, 13 Dec 2003 13:03:15 -0500
From: "John Shannon" <jsk3wwwp@alltel.net>
To: "QRP Mail List" <qrp-l@lehigh.edu>
Cc: <w2kj@bellsouth.net>
Subject: [163007] Increasing activity on 80M CW
Message-ID: <001701c3c1a3\$6efe5ea0\$287466a6@alltel.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> With all the talk of having the Fox hunts on 80m lately I would sure like
to
> see more activity in general on 80m CW.

Absolutely. I recall back in the 60's when 80m was pretty much wall to wall activity in the CW segment. Now on a good non-contest evening you might hear 5-10 QSO's between 3500 and 3600 excluding TFC nets.

80M is a wonderful QRP band, especially in the winter when QRN is low. I have many great rag chews there with solid copy for a half hour or more.

With the sunspot cycle heading toward a minimum now, 80M will get even better as ionospheric absorption becomes less at the lower frequencies.

I don't really think contests or sprints are the answer. These will populate the bands for the period of time the event is running, but then it will go back to its dead state again. Just listen during a major contest - the band is completely full, then as soon as the contest is over, it's back to the status quo again.

Perhaps the answer is more in awards than contests. Awards require being active on a band for longer periods of time than a contest or sprint.

How about some organization coming up with an award for an 80M rag chew WAS, just as a quick example off the top of my head. You'd have to be on the band at various times of evening and night to reach all the different states and you'd have to do more than just exchange a number as you would in a contest because of the rag chew aspect. Or even just an award for rag chew type QSO's with something like 100 different stations or 20 different states, because it would be hard for an east coast QRP station to have rag chews with KH6 and KL7 on 80M. This would make the band seem more alive and keep those who casually tune across the band interested. Maybe they'd hang around and call CQ themselves increasing activity still more, causing a snowball effect.

If some organization would get busy and really sell (promote) some kind of 80M award, maybe that would help.

> Will be looking for CW OPS around 3560Khz in the next few days to see if
> any interest is generated.

We also need to spread out the activity on the band instead of hanging out around 3558 (FISTS) and 3560 (QRP) frequencies. I like those frequencies myself, but I also operate elsewhere on the band.

Even with the declining activity on 80M I still can use that band to get my daily QRP QSO to maintain my 'Streak' most any evening. You can see that from the 'Streak' table on the main page of my web site or from my on-line logs in the Logs section of the site.

Hope to work more of you on 80M as the days go by and the sunspots decline further.

~~~~~  
73 - John, K3WWP - 100% CW & QRP  
using simple wire antennas.

<http://home.alltel.net/johnshan/>

My website is now in its eighth year  
of operation and includes the following:

DX QSL Routes \*\* Operating Tips  
QRP Rigs Info \*\* CW Contest Calendar  
Daily Propagation Info \*\* Your CW Stories  
Teens and CW \*\* Monthly polls  
Categorized Quality Links \*\* MUCH MORE

If you love Morse Code, please join the  
FISTS club - <http://www.fists.org>  
I'm proud to be FISTS # 2002  
~~~~~

Date: Sat, 13 Dec 2003 10:18:28 -0800 (PST)
From: Jim WD9EYB <wd9eyb1203@yahoo.com>
To: qrp-l@lehigh.edu
Subject: [163008] RE: Download Price for QST
Message-ID: <20031213181828.34195.qmail@web20027.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

I think it should be free for members. Of course
someone might abuse that so put some limit on it.
If they want more they can pay something.

Jim, WD9EYB
wd9eyb@arrl.net

Do you Yahoo!?
Free Pop-Up Blocker - Get it now
<http://companion.yahoo.com/>

Date: Sat, 13 Dec 2003 11:43:21 -0700 (MST)
From: Karl Larsen <k5di@zianet.com>
To: qrp-l@lehigh.edu
Subject: [163009] ARRL 10 meter contest
Message-ID: <Pine.LNX.4.44.0312130924310.4692-100000@bucket.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Right now this contest is active and 10 meters is opening up.
There was a lot of activity yesterday afternoon. I am convinced 10
meters is open a lot of the time but no-one is calling CQ.

--

- Karl Larsen k5di Las Cruces, NM Az ScQRPions -

Date: Sat, 13 Dec 2003 11:47:01 -0700
From: "James R. Duffey" <JamesDuffey@comcast.net>
To: <master72@lipetsk.ru>
Cc: <k5di@zianet.com>, <ARDUJENSKI@aol.com>, QRP-L <qrp-l@lehigh.edu>
Subject: [163010] Re: Single wire feed Windom
Message-ID: <BC00ACB5.102CD%JamesDuffey@comcast.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Karl, Oleg, and Alan - The Windom and VSA1AA are the same antenna. Windom reported on research done at Ohio State on single feedline antennas in QST in the late 20s and the antenna came to have his name, even though he had little or no role in developing it.

I am not sure how VS1AA's call got attached to the antenna abroad, but it is used commonly in other parts of the world than the US. The off center fed antennas of today, such as the Carolina Windom are descendants of this antenna.

We now realize that the single wire feedline, is not a feedline at all, but a radiating part of the antenna. So unless one can control the position and length of this portion of the antenna, there are better choices for an antenna these days.

How person's names become attached to things, and how they vary throughout the world is interesting. The W3DZZ antenna is widely known in England and

Europe, but in this country if you mention it you draw a blank from most hams. Here we just call it a trap dipole. W3DZZ first wrote about it in QST. Everybody knows what a Yagi antenna, but fewer still know that it formally known as a Yagi-Uda antenna. Uda did most of the work, but could not speak English, so Yagi, who could speak and write English, was selected to discuss the antenna and write the scholarly articles that appeared in the US technical journals. In a turnabout, the W3EDP antenna was written up in QST by Yardley Beers, then a 2, now W0YF(?), but somehow kept the W3EDP moniker.

- Dr. Megacycle KK6MC/5

James R. Duffey KK6MC/5
Cedar Crest NM 87009 DM65

Date: Sat, 13 Dec 2003 13:15:15 -0600
From: George Fremin III <geoiiii@kkn.net>
To: Armin Hachmer <armin@muskoka.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [163011] Re: Hello? Hello? CQ 10m
Message-ID: <20031213191515.GB20993@kkn.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

On Sat, Dec 13, 2003 at 11:12:48AM -0500, Armin Hachmer wrote:
> am i the only one hearing NOTHING
> on 10m for the ARRL contest ?

I have a guest op at my station and he has about 1200 contacts so far - 19z - so I think he is hearing a few things.

--
George Fremin III - K5TR
geoiiii@kkn.net
<http://www.kkn.net/~k5tr>

Date: Sat, 13 Dec 2003 11:38:06 -0800 (PST)
From: Bob KB2FEL <kb2fel@yahoo.com>
To: Low Power Amateur Radio <qrp-1@lehigh.edu>
Subject: [163012] Tonights CQC contest es 80 meter fox

Message-ID: <20031213193806.27909.qmail@web60510.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Hi Gang,

Tonight will be a good time to test 80 meters for possible fox hunting. The time for tonight's CQC Contest is the same as the FOX hunts (02:00 to 04:00).

I will be QRV from my home here in (West By-God Virginia). I will be using 5 watts into my 40 meter inverted Vee and working the test on 80 meters only. I hope to start just above 3.060. If nothing I will move up to the above the Color oscillator freg Hi.

Hope to see you all there testing 80 meters

72
Bob
KB2FEL
CQC#745

Do you Yahoo!?
Protect your identity with Yahoo! Mail AddressGuard
<http://antispam.yahoo.com/whatsnewfree>

Date: Sat, 13 Dec 2003 14:01:24 -0600
From: George Franklin <w0av@juno.com>
To: k5di@zianet.com
Cc: qrp-1@Lehigh.EDU
Subject: [163013] Re: Re[2]: Single wire feed Windom?
Message-ID: <20031213.140124.-16043919.0.w0av@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gents,

As I recall, one of Mr. Windom's calls was VS1AA.

73 de George/W0AV

Date: Sat, 13 Dec 2003 15:21:26 -0500
From: Ray Sills <raysills@1stconnect.com>
To: QRP list <qrp-l@lehigh.edu>
Subject: [163014] Re: New Morse code character
Message-ID: <EDC5E784-2DA9-11D8-8FF3-003065EAB9EC@1stconnect.com>
Content-Type: text/plain; charset=US-ASCII; format=flowed
Mime-Version: 1.0 (Apple Message framework v553)
Content-Transfer-Encoding: 7bit

It's a good idea to have that symbol available as a morse character.
The irony is that it takes more time to send than simply "AT"! And,
somehow, the new character seems more like WR than AC.

On Wednesday, December 10, 2003, at 03:21 PM, Dennis Ponsness wrote:

> Looks like we will be needing to learn a new character now. Just saw
> an
> article on the ARRL website that the ITU is going to adopt a character
> for
> the "@" symbol that is used in email addys. They decided on "AC"
> (---..)
> for this. Wonder how long it has been since a character was added?
>
> 72/73
>
> Dennis - WB0WAO
>
>

73 de Ray
K2ULR
FN20t1

Date: Sat, 13 Dec 2003 15:24:02 -0500
From: "John J. McDonough" <wb8rcr@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [163015] Elmer 160: Lesson 4
Message-ID: <01a801c3c1b7\$0c88e560\$090044c0@BrianBoru>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Lesson 4 is now available an AmQRP for your reading enjoyment
(<http://www.amqrp.org/emler160>)

This one starts to exercise the MPLAB, and will likely take a little more time than 3 did.

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

Date: Sat, 13 Dec 2003 13:27:41 -0700
From: Ken <kloc@commspeed.net>
To: qrp-l@Lehigh.EDU
Subject: [163016] IRC QRP channel?
Message-ID: <5.2.1.1.2.20031213132314.00af21b8@mail.commspeed.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Group,

Is there an irc server and channel for qrp related chat?

Ken - WA4MNT

Date: Sat, 13 Dec 2003 15:27:19 -0500 (Eastern Standard Time)
From: "Mike WA8BXN" <hubby2k@hotmail.com>
To: <qrp-l@Lehigh.EDU>, <kb2fel@yahoo.com>
Subject: [163017] Re: Tonights CQC contest es 80 meter fox
Message-ID: <3FDB7627.000004.00136@etower>
MIME-Version: 1.0
Content-Type: Text/Plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Good idea but unfortunately the contest rules say 40M only!

I will try to get on 80 some during the contest and look for you. 80 is a great band. Having some contests etc there will increase activity beyond the contests because it will get people to get rigs and antennas for that band. Would be nice to see a new kit from some club for 80 M.

73/72 - Mike WA8BXN

-----Original Message-----

From: kb2fel@yahoo.com
Date: 12/13/03 15:06:25
To: Low Power Amateur Radio Discussion
Subject: Tonights CQC contest es 80 meter fox

Hi Gang,

Tonight will be a good time to test 80 meters for possible fox hunting. The time for tonight's CQC Contest is the same as the FOX hunts (02:00 to 04:00).

I will be QRV from my home here in (West By-God Virginia). I will be using 5 watts into my 40 meter inverted Vee and working the test on 80 meters only. I hope to start just above 3.060. If nothing I will move up to the above the Color oscillator freq Hi.

Hope to see you all there testing 80 meters

72
Bob
KB2FEL
CQC#745

Do you Yahoo!?
Protect your identity with Yahoo! Mail AddressGuard
<http://antispam.yahoo.com/whatsnewfree>

Date: Sat, 13 Dec 2003 16:00:46 -0500
From: "Armin Hachmer" <armin@muskoka.com>
To: "George Fremin III" <geoiiii@kkn.net>
Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [163018] Re: Hello? Hello? CQ 10m
Message-ID: <000a01c3c1bc\$2f086e80\$606c7bd8@muskoka.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thanks George.
The band opened up for my humble set up shortly after i wrote that. Very little DX, but lots of US.

Date: Sat, 13 Dec 2003 16:07:03 -0500
From: "Armin Hachmer" <armin@muskoka.com>
To: <n8ie@woh.rr.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [163019] Re: Hello? Hello? CQ 10m
Message-ID: <004601c3c1bd\$25ea5600\$606c7bd8@muskoka.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

It got better after i asked the question, a bit better...
Utah, Cuba, CA, Peru, NM,
dont tell anyone i used 50 watts.
Still hangin in at 2100 Zulu.
Cheers.

>
> Your not alone brother, here in SW Ohio it's mostly TX
>
> 72, oo
> Dan, N8IE
>
> -----Original Message-----
> From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU]On Behalf Of
> Armin Hachmer
> Sent: Saturday, December 13, 2003 11:13 AM
> To: Low Power Amateur Radio Discussion
> Subject: Hello? Hello? CQ 10m
>
>
> am i the only one hearing NOTHING
> on 10m for the ARRL contest ?
> ---
> Incoming mail is certified Virus Free.
> Checked by AVG anti-virus system (<http://www.grisoft.com>).
> Version: 6.0.544 / Virus Database: 338 - Release Date: 11/25/2003
>
> ---
> Outgoing mail is certified Virus Free.
> Checked by AVG anti-virus system (<http://www.grisoft.com>).
> Version: 6.0.544 / Virus Database: 338 - Release Date: 11/25/2003
>

Date: Sat, 13 Dec 2003 13:06:50 -0800
From: Stephen Wandling <stephen@SwiftsureConsulting.com>
To: "John J. McDonough" <wb8rcr@arrl.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [163020] Re: Elmer 160: Lesson 4
Message-ID: <3FDB7F6A.8020907@SwiftsureConsulting.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=windows-1252; format=flowed
Content-Transfer-Encoding: 8bit

Make that:

<http://www.amqrp.org/elmer160/>

John J. McDonough wrote:

>Lesson 4 is now available an AmQRP for your reading enjoyment
>(http://www.amqrp.org/emler160)
>
>This one starts to exercise the MPLAB, and will likely take a little more
>time than 3 did.
>
>72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
>didileydadidah QRP-L #1446 Code Warriors #35
>
>
>
>
>

--

Regards,

Stephen Wandling
Project Manager
Swiftsure Consulting

P: (604) 649-1418

F: (604) 648-8945

"If I knew for a certainty that a man was coming to my house with the conscious design of doing me good, I should run for my life." Henry David Thoreau

Date: Sat, 13 Dec 2003 13:35:02 -0800 (PST)

From: Bob KB2FEL <kb2fel@yahoo.com>
To: qrp-1@Lehigh.EDU
Subject: [163021] Re: Tonights CQC contest es 80 meter fox
Message-ID: <20031213213502.8327.qmail@web60501.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

--- Mike WA8BXN <hubby2k@hotmail.com> wrote:
> Good idea but unfortunately the contest rules say
> 40M only!
>

Hi Hi

Insert Key Board before reading contest rules...
Guess I would have had a very low contest score Hi Hi.
Hmm maybe its to much clean mountain air...

Houston please Disregard my last transmission and pay
no attention to the man behind the curtain.

72
Bob
KB2FEL

Country Road take me home.. but keep me on 40 tonight!

Do you Yahoo!?
Protect your identity with Yahoo! Mail AddressGuard
<http://antispam.yahoo.com/whatsnewfree>

Date: Sun, 14 Dec 2003 00:27:07 +0300
From: "Oleg V. Borodin" <master72@lipetsk.ru>
To: Ken <kloc@commspeed.net>
Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [163022] Re: IRC QRP channel?
Message-ID: <1573689736.20031214002707@lipetsk.ru>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

K> Is there an irc server and channel for qrp related chat?

Couple of months back there was a QRP-Conference on an EchoLink.

Now it is not present. Why?
Who can it create again?

Wish you all the best!
72! de RV3GM Oleg ("Master-72") V. Borodin
RU-QRP Club <http://ruqrp.narod.ru>

=== In QRP We Trust! ===

Date: Sat, 13 Dec 2003 15:37:45 -0600
From: Wayne Rogers <w5kdj@juno.com>
To: armin@muskoka.com
Cc: qrp-1@Lehigh.EDU
Subject: [163023] Re: Hello? Hello? CQ 10m
Message-ID: <20031213.153746.-1898391.0.w5kdj@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I'm not in the test but am hearing lot of stations that are.

Wayne_W5KDJ
ex: SV0WWW_TF2WJN CW only
ARS_1392 ARCI_11325 FP-626 e-QSL
FISTS_10060 SOC_538 HQRP ARRL

Date: Sat, 13 Dec 2003 13:51:38 -0800
From: John Rollins <kd7bcy@teleport.com>
To: kloc@commspeed.net
Cc: qrp-1@lehigh.edu
Subject: [163024] Re: IRC QRP channel?
Message-ID: <a06020403bc013987c2b3@[192.168.8.17]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii" ; format="flowed"

>Is there an irc server and channel for qrp related chat?

I have seen very little ham radio activity on IRC... I guess most people would rather be on the air! I've been around to a few networks and haven't seen more than 3-5 people in any ham channel, usually less. I hang out on DALnet and Freenode, if anyone wants to come hang out on DALnet come see if there is anyone in #Apollo_Domain. I just

created the channel the other day, pretty much as a nerd hang out.
Server list is available at www.dal.net(OK, it's a small land
incomplete list, but they seem to be the most reliable ones). My nick
on IRC is mine9.

--

John Rollins | KD7BCY | <http://home.teleport.com/~kd7bcy>
DALnet #Apollo_Domain | Ham-Mac mailing list <http://mailman.qth.net>

Date: Sat, 13 Dec 2003 16:54:42 -0500
From: <bill@n4qa.com>
To: <qrp-l@Lehigh.EDU>
Subject: [163025] DSWMULTI project scores its first DX...
Message-ID: <000901c3c1c3\$b807ac80\$6624ad80@f1n5n8>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

While waiting for Martha to return from doing some Christmas shopping, I
though I'd fire up on twenty RTTY...14082 KHz this time...to see if anyone
was around.
The DSW-20 may be only a monobander, but now it's a dualmoder :0)
Of course, CW is and always will be my first love...as far as amateur radio
modes go, that is.
I'm still making plenty of CW QSOs with the DSW-20, but this QRP RTTY stuff
is really fun too!

For info on the DSWMULTI project, including the full text of my first DX QSO
running the DSW-20-RTTY rig, please visit:
<http://www.n4qa.com/dswmulti/dswmulti.html>

I'm slowly working on the DSWMULTI project software and it probably won't be
ready 'til sometime in early 2004.

73.
Bill, N4QA
<http://www.n4qa.com>

Date: Sat, 13 Dec 2003 17:15:28 -0500

From: "John Farnsworth" <johnfarns@bellsouth.net>
To: "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [163026] Paddle Polarity
Message-ID: <DIEHLGHLBGPNJENLGEBKCEOKCBAA.johnfarns@bellsouth.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

OK so tip is usually dit and ring is dah. Got it. Now let me publicly
proclaim my ignorance and ask, for right handers, is the thumb side the dit
or the dah?

I did code for a year when I had my non-renewable Novice in the 60's, and
even had a homebrew keyer with tubes and a handmade paddle, but it's been
too long. I can't remember, but thumb-dah feels a little "righter" at this
point. If I'm going to get back into morse, I might as well start off
correctly. So can one of you fill me in?

Date: Sat, 13 Dec 2003 22:23:52 -0000
From: "Goody K3NG" <k3ng@qrpis.org>
To: <qrp-1@Lehigh.EDU>
Subject: [163027] QST
Message-ID: <000f01c3c1c7\$e3f5df20\$0169a8c0@loyalsock>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

No QRP Power column this month ? :-(

72
Goody
K3NG

Date: Sun, 14 Dec 2003 07:56:50 +0900
From: Jim Tittsler <7J1AJH@OnJapan.net>
To: qrp-1@lehigh.edu
Subject: [163028] Re: IRC QRP channel?
Message-ID: <20031213225650.GA5308@server.onjapan.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Disposition: inline

On Sat, Dec 13, 2003 at 01:27:41PM -0700, Ken wrote:

> Is there an irc server and channel for qrp related chat?

Occasionally there are a couple of folks on #qrp on
irc.radiochat.org (and also watching the DX spots
on #cqdx :-). But it has never reached critical mass.

72, Jim 7J1AJH

Date: Sat, 13 Dec 2003 16:55:32 -0800
From: "Nick Kennedy" <wa5bdu@tcainternet.com>
To: <johnfarns@bellsouth.net>,
 "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [163029] RE: [qrp-l] Paddle Polarity
Message-ID: <000601c3c1dc\$fa1d0e80\$0400000a@wa5bdu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

It's always funny to get asked that one, because after 40+ years of
using bugs and paddles, I always have to go to the paddle to remember
...

The thumb (left) side does the dits, the finger (right) side does the
dahs.

72--Nick, WA5BDU

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf
Of John Farnsworth
Sent: Saturday, December 13, 2003 2:15 PM
To: Low Power Amateur Radio Discussion
Subject: [qrp-l] Paddle Polarity

OK so tip is usually dit and ring is dah. Got it. Now let me publicly
proclaim my ignorance and ask, for right handers, is the thumb side the
dit or the dah?

Date: Sat, 13 Dec 2003 17:56:56 -0500
From: "NZ8J" <nz8j@woh.rr.com>
To: <qrp-l@Lehigh.EDU>
Subject: [163030] Re: new processor chip for LDG tuners - Results
Message-ID: <026601c3c1cc\$68bad630\$6400a8c0@NZ8J>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Just thought I would follow up on my previous post, I installed the upgrade in my AT-11MP today and in a word, it's GREAT!! It works super and after you get a few memories programmed, all you have to do is hit the key or start talking and it's tuned immediately....So far, it seems like a worthwhile upgrade..

73

Tim

NZ8J

----- Original Message -----

From: "NZ8J" <nz8j@woh.rr.com>
To: <qrp-l@Lehigh.EDU>
Sent: Sunday, November 30, 2003 6:14 PM
Subject: new processor chip for LDG tuners

> Hi,
> For those who own a Z-11 or AT-11MP autotuner by LDG, there is a new
> processor available that adds 200 memories to the tuner along with a
> couple
> other enhancements. http://www.ldgelectronics.com/mem_upgrade.html This
> may be old news, but I just ran across it and thought I would pass it on
> since many on this list use LDG tuners...

>

> 73

> Tim

> NZ8J

>

End of QRP-L Digest 3133
